

**Rare Plant Status Review:**  
**Name change: Hibiscus lasiocarpus to Hibiscus lasiocarpus var. occidentalis**

**List change from List 2.2 to 1B.2**

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*Hibiscus lasiocarpus* is an herbaceous perennial in the Malvaceae. In the *Jepson Manual* (1993), Steven Hill decided to treat California hibiscus plants as part of the widespread *H. lasiocarpus* (no infraspecific taxa were recognized). Recently, Hill (2009. Notes on California Malvaceae including nomenclatural changes and additions to the flora. *Madroño* 56(2):104-111) decided to recognize the California hibiscus as a distinct variety, *Hibiscus lasiocarpus* var. *occidentalis*, endemic to California's Central Valley. Characteristics that differentiate *H. lasiocarpus* var. *occidentalis* from *H. lasiocarpus* var. *lasiocarpus* include more uniformly cordate leaves, overall height (California plants grow taller), and the production of "long starchy rhizomes from which they often propagate themselves in their native habitat, marshes and deltaic areas subject to unreliable water levels" (Hill 2009). *H. lasiocarpus* var. *occidentalis* will be recognized as a taxon restricted to California in the 2<sup>nd</sup> Edition of the *Jepson Manual* and the *Flora of North America*.

We propose to adopt this new taxonomic treatment and change the name of *H. lasiocarpus* to *H. lasiocarpus* var. *occidentalis* in the CNPS Inventory. **Please indicate in your comments whether or not you agree with this proposal.**

*H. lasiocarpus* var. *occidentalis* was first included as *H. californicus* on the list of "very rare and rare and endangered plants" in the 1<sup>st</sup> Edition (1974) of the CNPS Inventory. *H. californicus* was included on List 2 (plants rare and endangered) in the 2<sup>nd</sup> Edition (1980) of the CNPS Inventory. In the 4<sup>th</sup> Edition (1988) of the CNPS Inventory, *H. californicus* was included on List 1B (plants rare, threatened, or endangered in California and elsewhere). In the 5<sup>th</sup> Edition (1994) of the Inventory, based on new taxonomic treatments which considered California plants to be part of a more widespread species, *H. lasiocarpus* (spelling was later changed to *lasiocarpus*) was re-ranked to List 2 (plants rare threatened or endangered in California but more common elsewhere), and it has remained on this list ever since.

*H. lasiocarpus* var. *occidentalis* is restricted to 132 occurrences from nine counties in the delta and the northern Central Valley. Despite the relatively large number of occurrences *H. lasiocarpus* var. *occidentalis* is ranked as a G4T2, S2 taxon by the CNDDDB due to many small populations and the plant's association with erodable, changeable wetland habitats. Below is a table displaying occurrence statistics for *H. lasiocarpus* var. *occidentalis*.

Occurrence Statistics for <i>H. lasiocarpus</i> var. <i>occidentalis</i> Data from CNDDDB, November 2009											
Total # of Known Element Occurrences	Element Occurrence Ranks						Population Status		Presence		
	A	B	C	D	X	U	Historic >20 years	Recent <=20 years	Present, Extant	Possibly Extirpated	Extirpated
132	2	37	15	6	1	71	76	56	131	0	1

Out of the 132 known occurrences of *H. lasiocarpus* var. *occidentalis* a total of 39 are ranked as “good” or “excellent” by CNDDDB. 21 occurrences are ranked “fair” or “poor”, and one occurrence is considered extirpated. 56 (approximately 42%) of the documented occurrences are considered “historic” by CNDDDB, meaning they have not been documented for at least 20 years. Note that we suspect the high number of A and B-ranked occurrences is likely an overestimate in this case.

A number of factors contribute to the rarity of *H. lasiocarpus* var. *occidentalis*. Population data are known for 86 out of 132 (65%) known occurrences of *H. lasiocarpus* var. *occidentalis*. Out of these 86 occurrences 65 (75%) are known from fewer than 100 individuals. Furthermore, a total of 40 occurrences of *H. lasiocarpus* var. *occidentalis* are known from 10 or fewer individuals.

Primary threats to *H. lasiocarpus* var. *occidentalis* include agriculture, development, bank erosion, recreational activities, waterway bank protection/maintenance, and weed control measures. The small population size at many occurrences of *H. lasiocarpus* var. *occidentalis* makes them vulnerable to extirpation. Furthermore, the fact that many occurrences exist at or near sea level make them vulnerable to the anticipated sea level rise associated with global climate change. In addition, a change in salinity in the Delta would also potentially reduce habitat for this taxon.

Plants on CNPS List 1B are considered rare, threatened or endangered in California and elsewhere. Plants on this list generally have fewer than 50 extant occurrences ranked as good or better by CNDDDB. The rarity of and threats to *H. lasiocarpus* var. *occidentalis* lead us to recommend that it be re-ranked from List 2.2 to 1B.2.

**Recommended Action**

**CNPS:** Re-rank from CNPS List 2.2 to List 1B.2

**CNDDDB:** Keep on CNDDDB G4T2, S2

**Revised CNPS *Inventory* record:**

*H. lasiocarpus* Cav. var. *occidentalis* (Torr.) A. Gray

Californis hibiscus

Malvaceae

List 1B.2

Butte (BUT), Contra Costa (CCA), Colusa (COL), Glenn (GLE), Sacramento (SAC), San Joaquin (SJQ), Solano (SOL), Sutter (SUT), Yolo (YOL) Stockton West (462A) 3712183, Holt (462B) 3712184, Woodward Island (463A) 3712185, Brentwood (463B) 3712186, Clifton Court Forebay (463D) 3712175, Thornton (479B) 3812124, Terminus (479C) 3812114, Isleton (480A) 3812125, Rio Vista (480B) 3812126, Jersey Island (480C) 3812116, Bouldin Island (480D) 3812115, Bruceville (496C) 3812134, Liberty Island (497C) 3812136, Courtland (497D) 3812135, Sacramento West (513D) 3812155, Sutter Causeway (529B) 3812186, Knights Landing (529C) 3812176, Gilsizer Slough (544C) 3912116, Sutter Buttes (545A) 3912127, Meridian (545B) 3912128, Tisdale Weir (545D) 3912117, West Of Biggs (561A) 3912147, Butte City (561B) 3912148, Sanborn Slough (561C) 3912138, Pennington (561D) 3912137, Logandale (562B) 3912242, Hamlin Canyon (576B) 3912166, Shippee (576C) 3912156, Ord Ferry (577B) 3912168, Llano Seco (577C) 3912158, Nelson (577D) 3912157, Paradise West (592C) 3912176, Richardson Springs (593D) 3912177

Marshes and swamps (MshSw)(freshwater); Elevation 0-120 meters.

Herb(rhizomatous), blooms Jun-Sep.

Most occurrences are very small. Seriously threatened by habitat disturbance, development, agriculture, recreation, and channelization of the Sacramento River and its tributaries. Also threatened by weed control measures and erosion. See Madroño 56(2):104-111 for revised taxonomy.